SRA Snapshots Video Science™: Level A
correlation to
Colorado Model Content Standards: Science
Grade 3

SRA Snapshots Video Science™ consists of four interdependent components. Each level has four program DVDs that provide engaging video lessons. The student edition (**SE**) provides student friendly text that reinforces the concepts introduced in the video. The Teacher's Resource Book (**TRB**) provides support activities in a blackline master format. The Teacher's Guide (**TG**) provides lesson planning, differentiated instruction activities, and answers to all student activities in the Student Edition.

KEY:

Reference	**Program Component**
Video	Video lessons on program DVDs
SE	Student Edition
TRB	Teacher's Resource Book
TG	Teacher's Guide

Standard 1: Students will understand the processes of scientific investigation and design, conduct, communicate about, and evaluate such investigations.
In grade 3, what students know and are able to do includes: Asking questions and stating predictions (hypotheses) that can be addressed through scientific investigation.
Chapter 1, Lesson 1, Process Skill, SE page 7; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, Lesson 3, Process Skill, SE page 43; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, Lesson 2, Process Skill, SE page 79; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, Lesson 3, Process Skill, SE page 131; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 1, Process Skill, SE page 183; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 1: Students will understand the processes of scientific investigation and design, conduct, communicate about, and evaluate such investigations.
In grade 3, what students know and are able to do includes: Selecting and using simple devices to gather data related to an investigation (for example, length, volume, and mass measuring instruments, thermometers, watches, magnifiers, microscopes, calculators, and computers).
Chapter 3, Lesson 2, Video A, SE page 55; Video B, SE page 56; Video C, SE page 57 **Chapter 5, KnowZone, SE pages 96-97; Lesson 3, Video A, SE page 105** **Chapter 6, KnowZone, SE page 124-125; Lesson 3, Video B, SE page 128; Video C, SE page 129; Process Skill, SE page 131** **Chapter 7, LabTime Hands-On Activity, TRB pages 123-125; TG page 138** **Chapter 8, Lesson 1, Video C, SE page 187; LabTime Hands-On Activity. TRB ages 141-143, TG page 156**

Standard 1: Students will understand the processes of scientific investigation and design, conduct, communicate about, and evaluate such investigations.
In grade 3, what students know and are able to do includes: Using data based on observations to construct a reasonable explanation.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 1: Students will understand the processes of scientific investigation and design, conduct, communicate about, and evaluate such investigations.
In grade 3, what students know and are able to do includes: Communicating about investigations and explanations.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, Lesson 2, Process Skill, SE page 167; Lesson 3, Process Skill, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 2: Physical Science: Students know and understand common properties, forms, and changes in matter and energy.
Strand 2.1: Students know that matter has characteristic properties, which are related to its composition and structure.
In grade 3, what students know and are able to do includes: Examining, describing, classifying, and comparing tangible objects in terms of common physical properties (for example, state of matter, size, shape, texture, flexibility, color).
Chapter 8, Lesson 1, Video B, SE page 158; Video C, SE page 159; Lesson 2, Process Skill, SE page167; KnowZone, SE pages 168-169; Lesson 3, Video B, SE page 172; Video C, SE page 173

Standard 2: Physical Science: Students know and understand common properties, forms, and changes in matter and energy.
Strand 2.1: Students know that matter has characteristic properties, which are related to its composition and structure.
In grade 3, what students know and are able to do includes: Measuring common physical properties of objects (for example, length, mass, volume, temperature).
Chapter 3, Lesson 3, Process Skill, SE page 65 **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **The Metric System, SE page 200-201**

Standard 2: Physical Science: Students know and understand common properties, forms, and changes in matter and energy.
Strand 2.1: Students know that matter has characteristic properties, which are related to its composition and structure.
In grade 3, what students know and are able to do includes: Creating mixtures and separating them based on differences in properties (for example, salt and sand, iron filings and soil, oil and water).
See Level B: **Chapter 7, Lesson 2, Video B, SE page 150**

Standard 2: Physical Science: Students know and understand common properties, forms, and changes in matter and energy.
Strand 2.2: Students know that energy appears in different forms; and can move (be transferred) and change (be transformed).
In grade 3, what students know and are able to do includes: Recognizing that energy (for example, light, heat, motion, sound, mechanical) can affect common objects and is involved in common events.
Chapter 8, Lesson 3, Video A, SE page 171; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156 **Chapter 9, Lesson 1, Video A, SE page 179; Video C, SE page181; Process Skill, SE page 183; Lesson 2, Video A, SE page 187; Lesson 3, Video A, SE page 193; Video B, SE page 194; Video C, SE page195; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 2: Physical Science: Students know and understand common properties, forms, and changes in matter and energy.
Strand 2.2: Students know that energy appears in different forms; and can move (be transferred) and change (be transformed).
In grade 3, what students know and are able to do includes: Making observations and gathering data on quantities associated with energy, movement, and change (for example, distances for a bean-launcher, time for a melting ice cube).
Chapter 7, KnowZone, SE pages 140-141; Lesson 2, Process Skill, SE page 147; Lesson 3, Process Skill, SE page 153; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 **Chapter 8, Lesson 3, Process Skill, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156**

Standard 2: Physical Science: Students know and understand common properties, forms, and changes in matter and energy.
Strand 2.2: Students know that energy appears in different forms; and can move (be transferred) and change (be transformed).
In grade 3, what students know and are able to do includes: Comparing quantities associated with energy movement and change by constructing simple diagrams or charts (for example, graph of launch distances, charts of melting time).
Chapter 7, Lesson 3, Process Skill, SE page 153; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 **Chapter 8, Lesson 3, Process Skill, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 1, Process Skill, SE page 183; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 2: Physical Science: Students know and understand common properties, forms, and changes in matter and energy.
Strand 2.3: Students understand that interactions can produce changes in a system, although the total quantities of matter and energy remain unchanged.
In grade 3, what students know and are able to do includes: Observing and describing parts of system (for example, water in a closed jar, water in an open jar, a plant terrarium).
Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4; Video C, SE page 5; Lesson 3, Video A, SE page 17; Video B, SE page 18; Video C, SE page 19; Process Skill, SE page 21; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Video C, SE page 27; Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Lesson 3, Video A, SE page 39; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; Lesson 2, Video B, SE page 56; Video C, SE page 57; Lesson 3, Video B, SE page 62; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, Lesson, 1, Video B, SE page 70; Video C, SE page 71; Lesson 2, Video A, SE page 75; Video B, SE page 76; Video C, SE page 77; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, Lesson 1, Video A, SE page 91; Video B, SE page 92; Video C, SE page 93; Lesson 2, Video A, SE page 99; Video B, SE page 100; Video C, SE page 101; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video C, SE page 115; Lesson 2, Video A, SE page 119; Video B, SE page 120; Video C, SE page 121; Lesson 3, Video A, SE page 127; Video B, SE page 128; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, Lesson 1, Video A, SE page 135; Video B, SE page 136; Video C, SE page 137; Lesson 2, Video A, SE page 143; Video B, SE page 144; Video C, SE page 145; Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Video C, SE page 159; Lesson 2, Video A, SE page 163; Video B, SE page 164; Video C, SE page 165; Lesson 3, Video A, SE page 171; Video B, SE page 172; Video C, SE page 173; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180; Video C, SE page 181; Lesson 2, Video A, SE page 187; Video B, SE page 188; Video C, SE page 189; Lesson 3, Video A, SE page 193; Video B, SE page 194; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174** **Energy Transfer, SE page 203** **Planet Earth, SE page 204** **Earth in Space, SE page 205**

Standard 2: Physical Science: Students know and understand common properties, forms, and changes in matter and energy.
Strand 2.3: Students understand that interactions can produce changes in a system, although the total quantities of matter and energy remain unchanged.
In grade 3, what students know and are able to do includes: Describing an observed change (for example, a melting ice cube, crystal growth, burning candle, physical breakage) in terms of starting conditions, type of change, and ending conditions, using words, diagrams, or graphs.
Chapter 7, Lesson 2, Process Skill, SE page 147; Lesson 3, Process Skill, SE page 153; Writing in Science, SE page 153; Process Skill, SE page 153; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 **Chapter 8, Lesson 2, Critical Thinking, SE page 167; Lesson 3, Critical Thinking, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 1, Process Skill, SE page 183; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 2: Physical Science: Students know and understand common properties, forms, and changes in matter and energy.
Strand 2.3: Students understand that interactions can produce changes in a system, although the total quantities of matter and energy remain unchanged.
In grade 3, what students know and are able to do includes: Predicting what changes and what remains unchanged when matter experiences an external influence (for example, a push or pull, addition or removal of heat, division of clay into pieces, melting an ice cube, changing a ball of clay to a flattened shape).
Chapter 7, Critical Thinking, SE page 139; Process Skill, SE page 139; Lesson 2, Critical Thinking, SE page 147; Process Skill, SE page 147; Lesson 3, Critical Thinking, SE page 153; Writing in Science, SE page 153; Process Skill, SE age 153; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 **Chapter 8, Lesson 2, Critical Thinking, SE page 167; Lesson 3, Process Skill, SE page 175; Lesson 2, Process Skill, SE page 167; Lesson 3, Process Skill, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 1, Process Skill, SE page 183; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3. 1: Students know and understand the characteristics of living things, the diversity of life, and how living things interact with each other and their environment.
In grade 3, what students know and are able to do includes: Distinguishing living from nonliving things.
Chapter 1, Lesson 1, Video A, SE page 3; Video C, SE page 5; Critical Thinking, SE page 7; Process Skill, SE page 7 **Chapter 2, Lesson 1, Video A, SE page 25; Critical Thinking, SE page 29; Process Skill, SE page 29; Lesson 2, Process Skill, SE page 35**

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3. 1: Students know and understand the characteristics of living things, the diversity of life, and how living things interact with each other and their environment.
In grade 3, what students know and are able to do includes: Classifying a variety of organisms according to selected characteristics (for example, backbone vs. no backbone).
Chapter 1, Lesson 2, Video A, SE page 9; Video B, SE page 10; Classification, SE page 202

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3. 1: Students know and understand the characteristics of living things, the diversity of life, and how living things interact with each other and their environment.
In grade 3, what students know and are able to do includes: Describing the basic needs (for example, food, water, air, shelter, space) of an organism.
Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4; Video C, SE page 5; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, Lesson 3, Video A, SE page 39** **Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; KnowZone, Se pages 52-53**

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3. 1: Students know and understand the characteristics of living things, the diversity of life, and how living things interact with each other and their environment.
In grade 3, what students know and are able to do includes: Giving examples of how organisms interact with each other and with nonliving parts of their habitat.
Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4; Video C, SE page 5; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, Lesson 1, Video A, SE page 25; Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Critical Thinking, SE page 35; Process Skill, SE page 35; Lesson 3, Video A, SE page 39; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66**

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3. 2: Students know and understand interrelationships of matter and energy in living systems.
In grade 3, what students know and are able to do includes: Recognizing that green plants need energy from sunlight and various raw materials to live, and animals consume plants and other organisms to live.
Chapter 2, Lesson 2, Video A, 31; Video B, SE page 32; Video C, SE page 33; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 **Energy Transfer, SE page 203**

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3. 2: Students know and understand interrelationships of matter and energy in living systems.
In grade 3, what students know and are able to do includes: Recognizing the interrelationships of organisms by tracing the flow of matter and energy in a food chain.
Chapter 2, Lesson 2, Video A, 31; Video B, SE page 32; Video C, SE page 33; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 **Energy Transfer, SE page 203**

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3. 3: Students know and understand how the human body functions, factors that influence its structures and functions, and how these structures and functions compare with those of other organisms.
In grade 3, what students know and are able to do includes: Describing human body systems (for example, digestion, respiratory, circulatory, skeletal, muscular).
See Level C: **Chapter 1, Lesson 3, Video B, SE page 16; Video C, SE page 17**

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3. 3: Students know and understand how the human body functions, factors that influence its structures and functions, and how these structures and functions compare with those of other organisms.
In grade 3, what students know and are able to do includes: Describing the basic food requirements for humans as summarized in the nutrition pyramid.
Chapter 3, Lesson 1, Video C, SE page 49; Critical Thinking, SE page 51; Process Skill, SE page 51

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3. 3: Students know and understand how the human body functions, factors that influence its structures and functions, and how these structures and functions compare with those of other organisms.
In grade 3, what students know and are able to do includes: Describing life cycles of selected organisms (for example, frog, chicken, butterfly, radish, bean plant).
Chapter 1, Lesson 3, Video A, SE page 17; Video B, SE page 18; Video C, SE page 19; Process Skill, SE page 21

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3.4: Students know and understand how organisms change over time in terms of biological evolution and genetics.
In grade 3, what students know and are able to do includes: Identifying characteristics that are common to all individuals of a species (for example, offspring resemble their parents).
Chapter 1, Lesson 3, SE page 19

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3.4: Students know and understand how organisms change over time in terms of biological evolution and genetics.
In grade 3, what students know and are able to do includes: Recognizing that there are differences in appearance among individuals of the same population or group.
Chapter 1, Lesson 3, SE page 19

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3.4: Students know and understand how organisms change over time in terms of biological evolution and genetics.
In grade 3, what students know and are able to do includes: Identifying characteristics of plants and animals that allow them to live in specific environments.
Chapter 2, KnowZone, SE pages 36-37; Lesson 3, Video B, SE page 40; Lesson C, SE page 41; Writing in Science, SE page 43; Process Skill, SE page 43

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3.4: Students know and understand how organisms change over time in terms of biological evolution and genetics.
In grade 3, what students know and are able to do includes: Describing examples of extinct organisms based on fossil evidence (for example, dinosaurs).
Chapter 4, Lesson 2, Video B, SE page 76; Writing in Science, SE page 79; KnowZone, SE pages 80-81

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.1: Students know and understand the composition of earth, its history, and the natural processes that shape it.
In grade 3, what students know and are able to do includes: Describing different types and uses of Earth materials (for example, rocks, soil, minerals).
Chapter 4, Lesson 2, Video A, SE page 75; Video B, SE page 76; Video C, SE page 77; Lesson 3, Video A, SE page 83; Video B, SE page 84 **Chapter 5, Lesson 1, Video A, SE page 91; Lesson 2, Video A, SE page 99** **Chapter 9, Lesson 3, Video C, SE page 195**

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.1: Students know and understand the composition of earth, its history, and the natural processes that shape it.
In grade 3, what students know and are able to do includes: Recognizing that fossils are evidence of past life.
Chapter 4, Lesson 2, Video B, SE page 76; Writing in Science, SE page 79; KnowZone, SE pages 80-81

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.1: Students know and understand the composition of earth, its history, and the natural processes that shape it.
In grade 3, what students know and are able to do includes: Identifying major features of Earth's surface (for example, mountains, rivers, plains, hills, oceans, plateaus).
Chapter 4, Lesson 1, Video A, SE page 69

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.1: Students know and understand the composition of earth, its history, and the natural processes that shape it.
In grade 3, what students know and are able to do includes: Describing natural processes that change Earth's surface (for example, weathering, erosion, mountain building, volcanic activity).
Chapter 4, Lesson 1, Video B, SE page 70; Video C, SE page 71; Process Skill, SE page 73; **LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84**

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.1: Students know and understand the composition of earth, its history, and the natural processes that shape it.
In grade 3, what students know and are able to do includes: Recognizing that humans are affected by natural events (for example, earthquakes, volcanoes, floods).
Chapter 3, Lesson 3, Video B, SE page 62 **Chapter 4, Lesson 1, Video C, SE page 71; Critical Thinking, Se PAGE 73; Process Skill, SE page 73**

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.2: Students know and understand the general characteristics of the atmosphere and fundamental processes of weather.
In grade 3, what students know and are able to do includes: Recognizing that the Sun is a principal source of Earth's heat and light.
Chapter 6, Lesson 1, Video A, SE page 113; Lesson 3, Video A, SE page 127; Process Skill, SE page 131

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.2: Students know and understand the general characteristics of the atmosphere and fundamental processes of weather.
In grade 3, what students know and are able to do includes: Recognizing how our daily activities are affected by the weather (for example, types of clothing, travel plans, recreational activity).
Chapter 5, Lesson 3, Video B, SE page 106; Video C, SE page 107; Critical Thinking, SE page 109; Writing in Science, SE page 109; Process Skill, SE page 109

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.2: Students know and understand the general characteristics of the atmosphere and fundamental processes of weather.
In grade 3, what students know and are able to do includes: Describing existing weather conditions by collecting and recording weather data (for example, temperature, precipitation, amount of cloud cover).
Chapter 5, KnowZone, SE pages 96-97; Lesson 2, Process Skill, SE page 103; Lesson 3, Video A, SE page 105; Video B, SE page 106; Video C, SE page 107; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.3: Students know major sources of water, its uses, importance, and cyclic patterns of movement through the environment.
In grade 3, what students know and are able to do includes: Identifying major sources of water (for example, oceans, glaciers, rivers, groundwater, atmosphere).
Chapter 5, Lesson 2, Video A, SE page 99

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.3: Students know major sources of water, its uses, importance, and cyclic patterns of movement through the environment.
In grade 3, what students know and are able to do includes: Identifying and describing the states (solid, liquid, gaseous) in which water can be found on Earth.
Chapter 5, Lesson 2, Video B, SE page 100 **The Planet Earth, SE page 204**

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.3: Students know major sources of water, its uses, importance, and cyclic patterns of movement through the environment.
In grade 3, what students know and are able to do includes: Recognizing the importance and uses of water (for example, drinking, washing, irrigating).
Chapter 5, Lesson 2, Video A, SE page 99; Video B, SE page 100; Video C, SE page 101

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.4: Students know the structure of the solar system, composition and interactions of objects in the universe, and how space is explored.
In grade 3, what students know and are able to do includes: Describing what can be readily observed by the unaided eye in the daytime and nighttime sky (for example, the Sun, Moon, planets, stars, constellations).
Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video C, SE page 115; Lesson 3, Video A, SE page 127; Critical Thinking, SE page 131; Process Skill, SE page 131

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.4: Students know the structure of the solar system, composition and interactions of objects in the universe, and how space is explored.
In grade 3, what students know and are able to do includes: Describing the motion of Earth in relation to the Sun, including the concepts of day, night, and year.
Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video C, SE page 115; Lesson 3, Process Skill, SE page 131; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120 **Earth in Space, SE page 205**

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.4: Students know the structure of the solar system, composition and interactions of objects in the universe, and how space is explored.
In grade 3, what students know and are able to do includes: Recognizing the characteristics of seasons.
Chapter 6, Lesson 1, Video B, SE page 114; Critical Thinking, SE page 117; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.4: Students know the structure of the solar system, composition and interactions of objects in the universe, and how space is explored.
In grade 3, what students know and are able to do includes: Identifying basic components of the solar system (for example, Sun, planets, moons).
Chapter 6, Lesson 2, Video A, SE page 119; Video B, SE page 120; Video C, SE page 121; Writing in Science, SE page 123

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.4: Students know the structure of the solar system, composition and interactions of objects in the universe, and how space is explored.
In grade 3, what students know and are able to do includes: Describing a space exploration event such as a manned or unmanned space mission.
Chapter 6, Lesson 3, Video B, SE page 128; Video C, SE page 129; Critical Thinking, SE page 131

Standard 5: Students know and understand interrelationships among science, technology, and human activity and how they can affect the world.
In grade 3, what students know and are able to do includes: Recognizing the diversity of resources provided by the Earth and Sun (for example, soil, fuels, minerals, medicines, food).
Chapter 3, Lesson 3, Video A, SE page 61 **Chapter 4, Lesson 3, Video A, SE page 83; Video B, SE page 84; Video C, SE page 85** **Chapter 5, Lesson 2, Video A, SE page 99; Video C, SE page 101; Critical Thinking, SE page 103** **Chapter 9, Lesson 3, Video C, SE page 195**

Standard 5: Students know and understand interrelationships among science, technology, and human activity and how they can affect the world.
In grade 3, what students know and are able to do includes: Inventing a device that addresses an everyday problem (or task), and communicating the problem (or task), design, and solution.
Chapter 5, LabTime Hands-On Activity, TRB pages 87-89, TG page 102 **Chapter 9, Lesson 2 Process Skill, SE page 191**

Standard 5: Students know and understand interrelationships among science, technology, and human activity and how they can affect the world.
In grade 3, what students know and are able to do includes: Describing resource-related activities in which they could participate that can benefit their communities (for example, recycling, water conservation).
Chapter 3, Lesson 3, Video A, SE page 61; Video C, SE page 63; Process Skill, SE page 65 **Chapter 4, Lesson 2, Video A, SE page 83; Video B, SE page 84; Video C, SE page 85** **Chapter 5, Lesson 2, Video C, SE page 101** **Chapter 9, Lesson 3, video C, SE page 195**

Standard 5: Students know and understand interrelationships among science, technology, and human activity and how they can affect the world.
In grade 3, what students know and are able to do includes: Identifying careers that use science and technology.
Chapter 3, Lesson 2, Critical Thinking, SE page 159; Process Skill, SE page 59 **Chapter 4, Lesson 1, Critical Thinking, SE page 73; Lesson 3, Critical Thinking, SE page 87** **Chapter 5, Lesson 1, Process Skill, SE page 95; Lesson 3, Video A, SE page 105; Critical Thinking, SE page 109** **Chapter 6, Lesson 3, Critical Thinking, SE page 131** **Chapter 9, Lesson 3, Video C, SE page 195**

Standard 6: Students understand that science involves a particular way of knowing and understand common connections among scientific disciplines.
In grade 3, what students know and are able to do includes: Recognizing that when a science experiment is repeated with the same conditions, the experiment generally works the same way.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 6: Students understand that science involves a particular way of knowing and understand common connections among scientific disciplines.
In grade 3, what students know and are able to do includes: Comparing knowledge gained from direct experience to knowledge gained indirectly (for example, collecting data about student heights in their class and comparing the results to similar data collected in another class or school).
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, Lesson 3, Process Skill, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 6: Students understand that science involves a particular way of knowing and understand common connections among scientific disciplines.
In grade 3, what students know and are able to do includes: Identifying observable patterns and changes in their lives and predicting future events based on those patterns (for example, seasonal weather patterns).
Chapter 1, Lesson 3, Video A, SE page 17; Video B, SE page 18; Video C, SE page 19 **Chapter 2, Lesson 2, Video C, SE page 33** **Chapter 5, Lesson 2, Video B, SE page 100** **Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video SE page 115; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120**

Standard 6: Students understand that science involves a particular way of knowing and understand common connections among scientific disciplines.
In grade 3, what students know and are able to do includes: Describing and comparing the components and interrelationships of a simple system (for example, tracing the continuous flow of water through an aquarium, filter, and pump).
Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4; Video C, SE page 5; Lesson 3, Video A, SE page 17; Video B, SE page 18; Video C, SE page 19; Process Skill, SE page 21; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Video C, SE page 27; Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Lesson 3, Video A, SE page 39; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; Lesson 2, Video B, SE page 56; Video C, SE page 57; Lesson 3, Video B, SE page 62; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, Lesson, 1, Video B, SE page 70; Video C, SE page 71; Lesson 2, Video A, SE page 75; Video B, SE page 76; Video C, SE page 77; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, Lesson 1, Video A, SE page 91; Video B, SE page 92; Video C, SE page 93; Lesson 2, Video A, SE page 99; Video B, SE page 100; Video C, SE page 101; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video C, SE page 115; Lesson 2, Video A, SE page 119; Video B, SE page 120; Video C, SE page 121; Lesson 3, Video A, SE page 127; Video B, SE page 128; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, Lesson 1, Video A, SE page 135; Video B, SE page 136; Video C, SE page 137; Lesson 2, Video A, SE page 143; Video B, SE page 144; Video C, SE page 145; Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Video C, SE page 159; Lesson 2, Video A, SE page 163; Video B, SE page 164; Video C, SE page 165; Lesson 3, Video A, SE page 171; Video B, SE page 172; Video C, SE page 173; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180; Video C, SE page 181; Lesson 2, Video A, SE page 187; Video B, SE page 188; Video C, SE page 189; Lesson 3, Video A, SE page 193; Video B, SE page 194; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174** **Energy Transfer, SE page 203** **Planet Earth, SE page 204** **Earth in Space, SE page 205**

Standard 6: Students understand that science involves a particular way of knowing and understand common connections among scientific disciplines.
In grade 3, what students know and are able to do includes: Comparing a model with what it represents (for example, comparing a map of the school to the actual school; a model of the Earth to the Earth itself).
Chapter 4 LabTime Hands-On Activity, TRB Pages 69-71; TG page 84 **Chapter 5 LabTime Hands-On Activity, TRB Pages 87-89; TG page 102** **Chapter 6 LabTime Hands-On Activity, TRB pages 105-107; TG page 120** **Chapter 7, Lesson 3 Process Skill, SE page 153**

SRA Snapshots Video Science™: Level B
correlation to
Colorado Model Content Standards: Science
Grade 4

SRA Snapshots Video Science™ consists of four interdependent components. Each level has four program DVDs that provide engaging video lessons. The student edition (**SE**) provides student friendly text that reinforces the concepts introduced in the video. The Teacher's Resource Book (**TRB**) provides support activities in a blackline master format. The Teacher's Guide (**TG**) provides lesson planning, differentiated instruction activities, and answers to all student activities in the Student Edition.

KEY:

Reference	**Program Component**
Video	Video lessons on program DVDs
SE	Student Edition
TRB	Teacher's Resource Book
TG	Teacher's Guide

Standard 1: Students will understand the processes of scientific investigation and design, conduct, communicate about, and evaluate such investigations.
In grade 4, what students know and are able to do includes: Asking questions and stating predictions (hypotheses) that can be addressed through scientific investigation.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, Lesson 3, Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, Lesson 3, Process Skill, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 1: Students will understand the processes of scientific investigation and design, conduct, communicate about, and evaluate such investigations.
In grade 4, what students know and are able to do includes: Selecting and using simple devices to gather data related to an investigation (for example, length, volume, and mass measuring instruments, thermometers, watches, magnifiers, microscopes, calculators, and computers).
Chapter 1, Lesson 1, Video A, SE page 3 **Chapter 4, Lesson 2, Video C, SE page 77** **Chapter 5 LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, Lesson 3, Video A, SE page 125; Video B, SE page 126; Video C, SE page 127; KnowZone, SE pages 105-107; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, Lesson 2, Video A, SE page 143; Video B, SE page 144; Video C, SE page 145** **Chapter 8, Lesson 2, Video C, SE page 165; KnowZone, SE pages 168-169** **Chapter 9 KnowZone, SE pages 196-197**

Standard 1: Students will understand the processes of scientific investigation and design, conduct, communicate about, and evaluate such investigations.
In grade 4, what students know and are able to do includes: Using data based on observations to construct a reasonable explanation.
Chapter 1, Lesson 1, Process Skill, SE page 7; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, Lesson 2, Process Skill, SE page 35; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, Lesson 1, Process Skill, SE page 51; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, Lesson 3, Process Skill, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, Lesson 1, Process Skill, SE page 95; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, Lesson 2, Process Skill, SE page 123; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, Lesson 1, Process Skill, SE page 139; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 1, Process Skill, SE page 183; Lesson 3, Process Skill, SE page 195; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 1: Students will understand the processes of scientific investigation and design, conduct, communicate about, and evaluate such investigations.
In grade 4, what students know and are able to do includes: Communicating about investigations and explanations.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, Lesson 3, Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, Lesson 3, Process Skill, SE page 109; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 2: Physical Science: Students know and understand common properties, forms, and changes in matter and energy.
Strand 2.1: Students know that matter has characteristic properties, which are related to its composition and structure.
In grade 3, what students know and are able to do includes: Examining, describing, classifying, and comparing tangible objects in terms of common physical properties (for example, state of matter, size, shape, texture, flexibility, color).
Chapter 7, Lesson 1, Video A, SE page 135; Video B, SE page 136; Video C, SE page 137; Process Skill, SE page 139; KnowZone, SE pages 140-141; Lesson 2, Video A, SE page 143; Video B, SE page 144; Video C, SE page 145; Process Skill, SE page 147

Standard 2: Physical Science: Students know and understand common properties, forms, and changes in matter and energy.
Strand 2.1: Students know that matter has characteristic properties, which are related to its composition and structure.
In grade 4, what students know and are able to do includes: Measuring common physical properties of objects (for example, length, mass, volume, temperature).
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, Lesson 2, Video A, SE page 143; Video B, SE page 144; Video C, SE page 145; Process Skill, SE page 147** **Chapter 8, Lesson 3, Process Skill, SE page 175** **The Metric System, SE pages 200-201**

Standard 2: Physical Science: Students know and understand common properties, forms, and changes in matter and energy.
Strand 2.1: Students know that matter has characteristic properties, which are related to its composition and structure.
In grade 4, what students know and are able to do includes: Creating mixtures and separating them based on differences in properties (for example, salt and sand, iron filings and soil, oil and water).
Chapter 7, Lesson 2, Video B, SE page 150

Standard 2: Physical Science: Students know and understand common properties, forms, and changes in matter and energy.
Strand 2.2: Students know that energy appears in different forms; and can move (be transferred) and change (be transformed).
In grade 4, what students know and are able to do includes: Recognizing that energy (for example, light, heat, motion, sound, mechanical) can affect common objects and is involved in common events.
Chapter 8, Lesson 1, Video A, SE page 157; Lesson 3, Video B, SE page 172

Standard 2: Physical Science: Students know and understand common properties, forms, and changes in matter and energy.
Strand 2.2: Students know that energy appears in different forms; and can move (be transferred) and change (be transformed).
In grade 4, what students know and are able to do includes: Making observations and gathering data on quantities associated with energy, movement, and change (for example, distances for a bean-launcher, time for a melting ice cube).
Chapter 8, Lesson 1, Critical Thinking, SE page 161; Process Skill, SE page 161; Lesson 3, Critical Thinking, SE page 175

Standard 2: Physical Science: Students know and understand common properties, forms, and changes in matter and energy.
Strand 2.2: Students know that energy appears in different forms; and can move (be transferred) and change (be transformed).
In grade 4, what students know and are able to do includes: Comparing quantities associated with energy movement and change by constructing simple diagrams or charts (for example, graph of launch distances, charts of melting time).
Chapter 8, Lesson 1, Critical Thinking, SE page 161; Process Skill, SE page 161; Lesson 3, Critical Thinking, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156

Standard 2: Physical Science: Students know and understand common properties, forms, and changes in matter and energy.
Strand 2.3: Students understand that interactions can produce changes in a system, although the total quantities of matter and energy remain unchanged.
In grade 4, what students know and are able to do includes: Observing and describing parts of system (for example, water in a closed jar, water in an open jar, a plant terrarium).
Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Video C, SE page 27; Process Skill, SE page 29; Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Process Skill, SE page 35; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 **Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Lesson 2, Video A, SE page 55; Video B, SE page 56; Video C, SE page 57; Process Skill, SE page 59; Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63; Critical Thinking, SE page 65** **Chapter 4, Lesson 2, Video C, SE page 77** **Chapter 5, Lesson 1, Video A, SE page 91; Video B, SE page 92; Lesson 2, Video A, SE page 97; Lesson 3, Video C, SE page 107; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video C, SE page 115; Lesson 2, Video A, SE page 119; Video C, SE page 121; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, Lesson 1, Video C, SE page 137; Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Video C, SE page 157; Lesson 2, Video A, SE page 163; Video B, SE page 164; Video C, SE page 165; Lesson 3, Video C, SE page 173; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 1, Video C, SE page 181; Lesson 2, Video C, SE page 187; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 2: Physical Science: Students know and understand common properties, forms, and changes in matter and energy.
Strand 2.3: Students understand that interactions can produce changes in a system, although the total quantities of matter and energy remain unchanged.
In grade 4, what students know and are able to do includes: Describing an observed change (for example, a melting ice cube, crystal growth, burning candle, physical breakage) in terms of starting conditions, type of change, and ending conditions, using words, diagrams, or graphs.
Chapter 7, Lesson 1, Video C, SE page 137; Critical Thinking, SE page 139; Process Skill, SE page 139; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 **Chapter 8, Lesson 1, Video C, SE page 159; Lesson 3, Critical Thinking, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 2, Video A, SE page 185; Video B, SE page 186; Critical Thinking, SE page 189; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 2: Physical Science: Students know and understand common properties, forms, and changes in matter and energy.
Strand 2.3: Students understand that interactions can produce changes in a system, although the total quantities of matter and energy remain unchanged.
In grade 4, what students know and are able to do includes: Predicting what changes and what remains unchanged when matter experiences an external influence (for example, a push or pull, addition or removal of heat, division of clay into pieces, melting an ice cube, changing a ball of clay to a flattened shape).
Chapter 7, Lesson 1, Critical Thinking, SE page 139; Process Skill, SE page 139; Lesson 3, Video B, SE page 150; Video C, SE page 151; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 **Chapter 8, Lesson 1, Video C, SE page 159; Lesson 3, Critical Thinking, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 2, Critical Thinking, SE page 189; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3. 1: Students know and understand the characteristics of living things, the diversity of life, and how living things interact with each other and their environment.
In grade 4, what students know and are able to do includes: Distinguishing living from nonliving things.
Chapter 1, Lesson 1, Video A, SE page 3 **Chapter 2, Lesson 2, Video A, SE page 25** **Chapter 3, Lesson 2, Process Skill, SE page 59**

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3. 1: Students know and understand the characteristics of living things, the diversity of life, and how living things interact with each other and their environment.
In grade 4, what students know and are able to do includes: Classifying a variety of organisms according to selected characteristics (for example, backbone vs. no backbone).
Chapter 1, Lesson 2, Video B, SE page 10; Process Skill, SE page 13

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3. 1: Students know and understand the characteristics of living things, the diversity of life, and how living things interact with each other and their environment.
In grade 4, what students know and are able to do includes: Describing the basic needs (for example, food, water, air, shelter, space) of an organism.
Chapter 1, Lesson 1, Video A, SE page 3; Lesson 3, Video B, SE page 18; Video C, SE page 19; Critical Thinking, SE page 21 **Chapter 2, Lesson 1, Video A, SE page 25; Lesson 2, Video A, SE page 31; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, Lesson 1, Process Skill, SE page 51; Lesson 2, Video A, SE page 55**

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3. 1: Students know and understand the characteristics of living things, the diversity of life, and how living things interact with each other and their environment.
In grade 4, what students know and are able to do includes: Giving examples of how organisms interact with each other and with nonliving parts of their habitat.
Chapter 1, Lesson 1, Video C, SE page 5; Lesson 2, Video C, SE page 11; Lesson 3, video B, SE page 18; Video C, SE page 19; Critical Thinking, SE page 21 **Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Video C, SE page 27; Critical Thinking, SE page 29; Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Critical Thinking, SE page 35; Process Skill, SE page 35; KnowZone, SE page 36-37; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; Critical Thinking, SE page 43; Process Skill, SE page 43; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Video C, SE page 49; Critical Thinking, SE page 51; Process Skill, SE page 51; Lesson 2, Video A, SE page 55; Video B, SE page 56; Video C, SE page 57; Critical Thinking, SE page 59; Process Skill, SE page 59; Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63; Critical Thinking, SE page 65; Process Skill, SE page 65**

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3. 2: Students know and understand interrelationships of matter and energy in living systems.
In grade 4, what students know and are able to do includes: Recognizing that green plants need energy from sunlight and various raw materials to live, and animals consume plants and other organisms to live.
Chapter 2, Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Process Skill, SE page 35; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; Process Skill, SE page 43; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3. 2: Students know and understand interrelationships of matter and energy in living systems.
In grade 4, what students know and are able to do includes: Recognizing the interrelationships of organisms by tracing the flow of matter and energy in a food chain.
Chapter 2, Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Process Skill, SE page 35; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; Process Skill, SE page 43; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3. 3: Students know and understand how the human body functions, factors that influence its structures and functions, and how these structures and functions compare with those of other organisms.
In grade 4, what students know and are able to do includes: Describing human body systems (for example, digestion, respiratory, circulatory, skeletal, muscular).
See Level C: **Chapter 1, Lesson 3, Video B, SE page 16; Video C, SE page 17**

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3. 3: Students know and understand how the human body functions, factors that influence its structures and functions, and how these structures and functions compare with those of other organisms.
In grade 4, what students know and are able to do includes: Describing the basic food requirements for humans as summarized in the nutrition pyramid.
See Level A: **Chapter 3, Lesson 1, Video C, SE page 49; Critical Thinking, SE page 51; Process Skill, SE page 51**

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3. 3: Students know and understand how the human body functions, factors that influence its structures and functions, and how these structures and functions compare with those of other organisms.
In grade 4, what students know and are able to do includes: Describing life cycles of selected organisms (for example, frog, chicken, butterfly, radish, bean plant).
Level B: **Chapter 1, Lesson 3, Video C, SE page 19** **See also Level A:** **Chapter 1, Lesson 3, Video B, SE page 18; Process Skill, SE page 21** **See also Level C:** **Chapter 2, Lesson 2, Video A, SE page 31; KnowZone, SE pages 36-37**

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3.4: Students know and understand how organisms change over time in terms of biological evolution and genetics.
In grade 4, what students know and are able to do includes: Identifying characteristics that are common to all individuals of a species (for example, offspring resemble their parents).
Chapter 1, Lesson 2, Video B, SE page 10

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3.4: Students know and understand how organisms change over time in terms of biological evolution and genetics.
In grade 4, what students know and are able to do includes: Recognizing that there are differences in appearance among individuals of the same population or group.
See Level A: **Chapter 1, Lesson 3, SE page 19**

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3.4: Students know and understand how organisms change over time in terms of biological evolution and genetics.
In grade 4, what students know and are able to do includes: Identifying characteristics of plants and animals that allow them to live in specific environments.
Chapter 3, Lesson 1, Video A, SE page 47; Lesson 2, Video A, SE page 55; Video B, SE page 56; Video C, SE page 57

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3.4: Students know and understand how organisms change over time in terms of biological evolution and genetics.
In grade 4, what students know and are able to do includes: Describing examples of extinct organisms based on fossil evidence (for example, dinosaurs).
Chapter 1, Lesson 1, Video C, SE page 5; Math in Science, SE page 7; Process Skill, SE page 7 **Chapter 4, Lesson 2, Video B, SE page 76; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84**

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.1: Students know and understand the composition of earth, its history, and the natural processes that shape it.
In grade 4, what students know and are able to do includes: Describing different types and uses of Earth materials (for example, rocks, soil, minerals).
Chapter 4, Lesson 2, Video B, SE page 76; Lesson 3, Video A, SE page 81; Video B, SE page 82; Video C, SE page 83; KnowZone, SE pages 86-87; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 **Chapter 5, Lesson 1, Video C, SE page 93; Lesson 2, Video A, SE page 97** **Chapter 9, Lesson 2, Video A, SE page 191; Video B, SE page 192; Critical Thinking, SE page 195; Process Skill, SE page 195**

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.1: Students know and understand the composition of earth, its history, and the natural processes that shape it.
In grade 4, what students know and are able to do includes: Recognizing that fossils are evidence of past life.
Chapter 1, Lesson 1, Video C, SE page 5; Math in Science, SE page 7; Process Skill, SE page 7 **Chapter 4, Lesson 2, Video B, SE page 76; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84**

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.1: Students know and understand the composition of earth, its history, and the natural processes that shape it.
In grade 4, what students know and are able to do includes: Identifying major features of Earth's surface (for example, mountains, rivers, plains, hills, oceans, plateaus).
Chapter 4, Lesson 1, Video A, SE page 69

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.1: Students know and understand the composition of earth, its history, and the natural processes that shape it.
In grade 4, what students know and are able to do includes: Describing natural processes that change Earth's surface (for example, weathering, erosion, mountain building, volcanic activity).
Chapter 4, Lesson 1, Video B, SE page 70; Video C, SE page 71; Lesson 2, Video A, SE page 75

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.1: Students know and understand the composition of earth, its history, and the natural processes that shape it.
In grade 4, what students know and are able to do includes: Recognizing that humans are affected by natural events (for example, earthquakes, volcanoes, floods).
Chapter 4, Lesson 1, Video B, SE page 70; Critical Thinking, SE page 73; Lesson 2, Video A, SE page 75; Critical Thinking, SE page 79 **Chapter 5, Lesson 1, Video C, SE page 93; KnowZone, SE pages 102-103; Lesson 3, Video A, SE page 105; Video B, SE page 106**

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.2: Students know and understand the general characteristics of the atmosphere and fundamental processes of weather.
In grade 4, what students know and are able to do includes: Recognizing that the Sun is a principal source of Earth's heat and light.
Chapter 2, Lesson 2, Video A, SE page 31; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 **Chapter 5, Lesson 1, Video A, SE page 91; KnowZone, SE pages 102-103** **Chapter 6, Lesson 1, Video A, SE page 113** **Chapter 8, Lesson 2, Video A, SE page 163**

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.2: Students know and understand the general characteristics of the atmosphere and fundamental processes of weather.
In grade 4, what students know and are able to do includes: Recognizing how our daily activities are affected by the weather (for example, types of clothing, travel plans, recreational activity).
Chapter 5, Lesson 1, Video C, SE page 93; KnowZone, SE pages 102-103; Lesson 3, Video A, SE page 105; Video B, SE page 106

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.2: Students know and understand the general characteristics of the atmosphere and fundamental processes of weather.
In grade 4, what students know and are able to do includes: Describing existing weather conditions by collecting and recording weather data (for example, temperature, precipitation, amount of cloud cover).
Chapter 5, Lesson 1, Video A, SE page 91; Video B, SE page 92; Lesson 2, Video B, SE page 98; Video C, SE page 99; Process Skill, SE page 101; Lesson 3, Video C, SE page 107; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.3: Students know major sources of water, its uses, importance, and cyclic patterns of movement through the environment.
In grade 4, what students know and are able to do includes: Identifying major sources of water (for example, oceans, glaciers, rivers, groundwater, atmosphere).
Chapter 3, Lesson 2, Video A, SE page 55 **Chapter 4, Lesson 1, Video A, SE page 69**

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.3: Students know major sources of water, its uses, importance, and cyclic patterns of movement through the environment.
In grade 4, what students know and are able to do includes: Identifying and describing the states (solid, liquid, gaseous) in which water can be found on Earth.
Chapter 5, Lesson 1, Video A, SE page 91 **The Water Cycle, SE page 204**

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.3: Students know major sources of water, its uses, importance, and cyclic patterns of movement through the environment.
In grade 4, what students know and are able to do includes: Recognizing the importance and uses of water (for example, drinking, washing, irrigating).
Chapter 3, Lesson 2, Video A, SE page 55 **Chapter 5, Lesson 1, Video A, SE page 91; Video B, SE page 92; Video C, SE page 83; Critical Thinking, SE page 95**

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.4: Students know the structure of the solar system, composition and interactions of objects in the universe, and how space is explored.
In grade 4, what students know and are able to do includes: Describing what can be readily observed by the unaided eye in the daytime and nighttime sky (for example, the Sun, Moon, planets, stars, constellations).
Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video C, SE page 115; Critical Thinking, SE page 117; Process Skill, SE page 117; Lesson 2, Video A, SE page 119; Video C, SE page 121 **Eclipses, SE page 205**

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.4: Students know the structure of the solar system, composition and interactions of objects in the universe, and how space is explored.
In grade 4, what students know and are able to do includes: Describing the motion of Earth in relation to the Sun, including the concepts of day, night, and year.
Chapter 6, Lesson 1, Video B, SE page 114; Process Skill, SE page 117

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.4: Students know the structure of the solar system, composition and interactions of objects in the universe, and how space is explored.
In grade 4, what students know and are able to do includes: Recognizing the characteristics of seasons.
Chapter 6, Lesson 1, Video B, SE page 114 **Climate Zones, SE page 205**

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.4: Students know the structure of the solar system, composition and interactions of objects in the universe, and how space is explored.
In grade 4, what students know and are able to do includes: Identifying basic components of the solar system (for example, Sun, planets, moons).
Chapter 6, Lesson 2, Video A, SE page 119; Video B, SE page 120; Video C, SE page 121

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.4: Students know the structure of the solar system, composition and interactions of objects in the universe, and how space is explored.
In grade 4, what students know and are able to do includes: Describing a space exploration event such as a manned or unmanned space mission.
Chapter 6, Lesson 3, Video A, SE page 125; Video B, SE page 126; Video C, SE page 127; Critical Thinking, SE page 129; Math in Science, SE page 129

Standard 5: Students know and understand interrelationships among science, technology, and human activity and how they can affect the world.
In grade 4, what students know and are able to do includes: Recognizing the diversity of resources provided by the Earth and Sun (for example, soil, fuels, minerals, medicines, food).
Chapter 4, Lesson 2, Video B, SE page 76; Lesson 3, Video A, SE page 81; Video B, SE page 82; Video C, SE page 83; KnowZone, SE pages 86-87 **Chapter 5, Lesson 1, Video C, SE page 93; Lesson 2, Video A, SE page 97** **Chapter 9, Lesson 3, Video A, SE page 191; Video B, SE page 192; Critical Thinking, SE page 195; Process Skill, SE page 195**

Standard 5: Students know and understand interrelationships among science, technology, and human activity and how they can affect the world.
In grade 4, what students know and are able to do includes: Inventing a device that addresses an everyday problem (or task), and communicating the problem (or task), design, and solution.
Chapter 6, Lesson 1 Process Skill, SE page 117 **Chapter 9, Lesson 2 Process Skill, SE page 189; ; LabTime Hands-On Activity, TRB pages 159-161, TG page 174**

Standard 5: Students know and understand interrelationships among science, technology, and human activity and how they can affect the world.
In grade 4, what students know and are able to do includes: Describing resource-related activities in which they could participate that can benefit their communities (for example, recycling, water conservation).
Chapter 1, Lesson 1, Video C, SE page 5 **Chapter 2, Lesson 2, Critical Thinking, SE page 29; Lesson 3, Video C, SE page 41; Process Skill, SE page 43** **Chapter 3, Lesson 2, Critical Thinking, SE page 59; Lesson 3, Video C, SE page 63; Critical thinking, SE page 65; Process Skill, SE page 65** **Chapter 5, Lesson 1, Video C, SE page 93** **Chapter 9, Lesson 3, video A, SE page 191; Video B, SE page 192; Critical Thinking, SE page 195**

Standard 5: Students know and understand interrelationships among science, technology, and human activity and how they can affect the world.
In grade 4, what students know and are able to do includes: Identifying careers that use science and technology.
Chapter 2, Lesson 1, Process Skill, SE page 29; Lesson 3, Process Skill, SE page 43 **Chapter 5, Lesson 2, Video C, SE page 99** **Chapter 6, Lesson 2, Video C, SE page 121**

Standard 6: Students understand that science involves a particular way of knowing and understand common connections among scientific disciplines.
In grade 4, what students know and are able to do includes: Recognizing that when a science experiment is repeated with the same conditions, the experiment generally works the same way.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, Lesson 3, Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, Lesson 3, Process Skill, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 6: Students understand that science involves a particular way of knowing and understand common connections among scientific disciplines.
In grade 4, what students know and are able to do includes: Comparing knowledge gained from direct experience to knowledge gained indirectly (for example, collecting data about student heights in their class and comparing the results to similar data collected in another class or school).
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, Lesson 3, Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, Lesson 3, Process Skill, SE page 85; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 6: Students understand that science involves a particular way of knowing and understand common connections among scientific disciplines.
In grade 4, what students know and are able to do includes: Identifying observable patterns and changes in their lives and predicting future events based on those patterns (for example, seasonal weather patterns).
Chapter 1, Lesson 3, Video C, SE page 13 **Chapter 3, Lesson 2, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41** **Chapter 6, Lesson 1, Video B, SE page 114; Video C, SE page 115** **The Water Cycle, SE page 204** **Earth in Space, SE page 205**

Standard 6: Students understand that science involves a particular way of knowing and understand common connections among scientific disciplines.
In grade 4, what students know and are able to do includes: Describing and comparing the components and interrelationships of a simple system (for example, tracing the continuous flow of water through an aquarium, filter, and pump).
Chapter 2, Lesson 1, Video A, SE page 25; Video B, SE page 26; Video C, SE page 27; Process Skill, SE page 29; Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Process Skill, SE page 35; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 **Chapter 3, Lesson 1, Video A, SE page 47; Video B, SE page 48; Lesson 2, Video A, SE page 55; Video B, SE page 56; Video C, SE page 57; Process Skill, SE page 59; Lesson 3, Video A, SE page 61; Video B, SE page 62; Video C, SE page 63; Critical Thinking, SE page 65** **Chapter 4, Lesson 2, Video C, SE page 77** **Chapter 5, Lesson 1, Video A, SE page 91; Video B, SE page 92; Lesson 2, Video A, SE page 97; Lesson 3, Video C, SE page 107; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video C, SE page 115; Lesson 2, Video A, SE page 119; Video C, SE page 121; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, Lesson 1, Video C, SE page 137; Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Video C, SE page 157; Lesson 2, Video A, SE page 163; Video B, SE page 164; Video C, SE page 165; Lesson 3, Video C, SE page 173; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 1, Video C, SE page 181; Lesson 2, Video C, SE page 187; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 6: Students understand that science involves a particular way of knowing and understand common connections among scientific disciplines.
In grade 4, what students know and are able to do includes: Comparing a model with what it represents (for example, comparing a map of the school to the actual school; a model of the Earth to the Earth itself).
Chapter 4, Lesson 1, Process Skill, SE page 73; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84 **Chapter 6, Lesson 1, Process Skill, SE page 117** **Chapter 8, Lesson 3, Process Skill, SE page 175** **Chapter 9, Lesson 2, Process Skill, SE page 189**

SRA Snapshots Video Science™: Level C
correlation to
Colorado Model Content Standards: Science
Grade 5

SRA Snapshots Video Science™ consists of four interdependent components. Each level has four program DVDs that provide engaging video lessons. The student edition (**SE**) provides student friendly text that reinforces the concepts introduced in the video. The Teacher's Resource Book (**TRB**) provides support activities in a blackline master format. The Teacher's Guide (**TG**) provides lesson planning, differentiated instruction activities, and answers to all student activities in the Student Edition.

KEY:

Reference	**Program Component**
Video	Video lessons on program DVDs
SE	Student Edition
TRB	Teacher's Resource Book
TG	Teacher's Guide

Standard 1: Students will understand the processes of scientific investigation and design, conduct, communicate about, and evaluate such investigations.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Identifying and evaluating alternative explanations and procedures.
Chapter 1, Lesson 2, Process Skill, SE page 13; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, Lesson 1, Process Skill, SE page 51; Lesson 3, Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, Lesson 2, Process Skill, 81; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, Lesson 1, Process Skill, SE page 139; Lesson 2, Process Skill, SE page 147; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 3, Process Skill, SE page 197; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 1: Students will understand the processes of scientific investigation and design, conduct, communicate about, and evaluate such investigations.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Using examples to demonstrate that scientific ideas are used to explain previous observations and to predict future events (for example, plate tectonics and future earthquake activity).
Chapter 1, Lesson 3, Critical Thinking, SE page 19 **Chapter 2, Lesson 1, Critical Thinking, SE page 29** **Chapter 4, Lesson 1, Critical Thinking, SE page 73; KnowZone, SE pages 74-75; Lesson 3, Critical Thinking, SE page 87** **Chapter 5, Lesson 2, Critical Thinking, SE page 101; Lesson 3, Video B, SE page 104; Critical Thinking, SE page 107**

Standard 1: Students will understand the processes of scientific investigation and design, conduct, communicate about, and evaluate such investigations.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Asking questions and stating hypotheses that lead to different types of scientific investigations (for example, experimentation, collecting specimens, constructing models, researching scientific literature).
Chapter 1, Lesson 2, Process Skill, SE page 13; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, Lesson 1, Process Skill, SE page 51; Lesson 3, Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, Lesson 2, Process Skill, 81; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, Lesson 1, Process Skill, SE page 139; Lesson 2, Process Skill, SE page 147; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 3, Process Skill, SE page 197; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 1: Students will understand the processes of scientific investigation and design, conduct, communicate about, and evaluate such investigations.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Creating a written plan for an investigation.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, Lesson 2, Process Skill, SE page 101; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 2, Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 1: Students will understand the processes of scientific investigation and design, conduct, communicate about, and evaluate such investigations.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Using appropriate tools, technologies, and measurement units to gather and organize data.
Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4: Video C, SE page 5; Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Lesson 3, Video A, SE page 15; Video B, SE page 16 **Chapter 5 LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, Lesson 3, Video B, SE page 128; Video C, SE page 129** **Chapter 7, Lesson 2, Video B, SE page 144; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, Lesson C, Video C, SE page 165; KnowZone, SE pages 168-169** **Chapter 9, Lesson 2 Process Skill, SE page 191**

Standard 1: Students will understand the processes of scientific investigation and design, conduct, communicate about, and evaluate such investigations.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Interpreting and evaluating data in order to formulate conclusions.
Chapter 1, Lesson 2, Process Skill, SE page 13; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, Lesson 1, Process Skill, SE page 51; Lesson 3, Process Skill, SE page 65; LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, Lesson 2, Process Skill, 81; LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, Lesson 1, Process Skill, SE page 139; Lesson 2, Process Skill, SE page 147; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 3, Process Skill, SE page 197; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 1: Students will understand the processes of scientific investigation and design, conduct, communicate about, and evaluate such investigations.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Communicating results of their investigations in appropriate ways (for example, written reports, graphic displays, oral presentations).
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, Lesson 3, Process Skill, SE page 131; LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 1: Students will understand the processes of scientific investigation and design, conduct, communicate about, and evaluate such investigations.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Using metric units in measuring, calculating, and reporting results.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 5, Lesson 3, Process Skill, SE page 107; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 7, Lesson 2, Video B, SE page 144; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, Lesson 2, process Skill, Se page 165; KnowZone, SE pages 168-169; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 2, Process Skill, SE page 191** **The Metric System, SE pages 200-201**

Standard 1: Students will understand the processes of scientific investigation and design, conduct, communicate about, and evaluate such investigations.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Explaining that scientific investigations sometimes result in unexpected findings that lead to new questions and more investigations.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, Lesson 2, Process Skill, SE page 147; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 2, Process Skill, SE page 191**

Standard 1: Students will understand the processes of scientific investigation and design, conduct, communicate about, and evaluate such investigations.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Giving examples of how collaboration can be useful in solving scientific problems and sharing findings.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, Lesson 2, Process Skill, SE page 147; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 2, Process Skill, SE page 191**

Standard 2: Physical Science: Students know and understand common properties, forms, and changes in matter and energy.
Strand 2.1: Students know that matter has characteristic properties, which are related to its composition and structure.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Examining, describing, comparing, measuring, and classifying objects based on common physical and chemical properties (for example, states of matter, mass, volume, electrical charge, temperature, density, boiling points, pH, magnetism, solubility).
Chapter 7, Lesson 1, Video B, SE page 136; Lesson 2, Video A, SE page 143; Video B, SE page 144; Video C, SE page 145; Critical Thinking, SE page 147 **Chapter 8, Lesson 2, Video A, SE page 163**

Standard 2: Physical Science: Students know and understand common properties, forms, and changes in matter and energy.
Strand 2.1: Students know that matter has characteristic properties, which are related to its composition and structure.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Separating mixtures of substances based on their properties (for example, solubility, boiling points, magnetic properties, densities).
Chapter 7, Lesson 1, Video C, SE page 137; Critical Thinking SE page 139; Process Skill, SE page 139

Standard 2: Physical Science: Students know and understand common properties, forms, and changes in matter and energy.
Strand 2.1: Students know that matter has characteristic properties, which are related to its composition and structure.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Classifying and describing matter in terms of elements, compounds, mixtures, atoms, and molecules (for example, copper is an element, water is a compound, air is a mixture).
Chapter 7, Lesson 1, Video A, SE page 135; Video C, SE page 137; Critical Thinking, SE page 139; Process Skill, SE page 139; KnowZone, SE page 140-141; Lesson 3, Process Skill, SE page 153

Standard 2: Physical Science: Students know and understand common properties, forms, and changes in matter and energy.
Strand 2.1: Students know that matter has characteristic properties, which are related to its composition and structure.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Developing simple models to explain observed properties of matter (for example, using a particle model to account for the solubility of a substance).
Chapter 7, Lesson 1, Video B, SE page 136; Lesson 2, Critical Thinking, SE page 147; Lesson 3, Process Skill, SE page 153

Standard 2: Physical Science: Students know and understand common properties, forms, and changes in matter and energy.
Strand 2.2: Students know that energy appears in different forms; and can move (be transferred) and change (be transformed).
As students in grade 5 extend their knowledge, what they know and are able to do includes: Measuring quantities associated with energy forms (for example, temperature, mass, speed, distance, electrical charge, current, voltage).
Chapter 7, Lesson 2, Video A, SE page 143; Video B, SE page 144; Lesson 3, Video C, SE page 151 **Chapter 8, Lesson 2, Video C, SE page 165; Critical Thinking, SE page 167; Process Skill, SE page 167; KnowZone, SE pages 168-169; Lesson 3, Video B, SE page 172; Critical Thinking, SE page 175; Process Skill, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 2, Video A, SE page 187; Video B, SE page 188; Video C, SE page 189; Critical Thinking, SE page 191; Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 2: Physical Science: Students know and understand common properties, forms, and changes in matter and energy.
Strand 2.2: Students know that energy appears in different forms; and can move (be transferred) and change (be transformed).
As students in grade 5 extend their knowledge, what they know and are able to do includes: Describing qualitative and quantitative relationships, using data and observations and graphs, associated with energy transfer or energy transformation (for example, speed of object vs. height of ramp; length of string vs. pith of sound; electric current vs. volume of gas produced in electrolysis, with length of time kept constant).
Chapter 7, Lesson 3, Video C, SE page 151 **Chapter 8, Lesson 1, Video A, SE page 157; Video B, SE page 158; Video C, SE page 159; Critical Thinking, SE page 161; Process Skill, SE page 161; Lesson 2, Video A, SE page 163; Video B, SE page 164; Video C, SE page 165; Critical Thinking, SE page 167; Process Skill, SE page 167; KnowZone, SE pages 168-169; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 1, Critical Thinking, SE page 183; KnowZone SE pages 184-185; Lesson 2, Video A, SE page 187; Video B, SE page 188; Video C, SE page 189; Critical Thinking, SE page 191; Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 2: Physical Science: Students know and understand common properties, forms, and changes in matter and energy.
Strand 2.3: Students understand that interactions can produce changes in a system, although the total quantities of matter and energy remain unchanged.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Identifying and classifying factors causing change within a system (for example, force, light, heat).
Chapter 7, Lesson 1, Video B, SE page 137; Video B, SE page 138; Lesson 2, Video A, SE page 143; Video B, SE page 144; Video C, SE page 145; Lesson 3, Video A, SE page 149; Video B, SE page 150; Video C, SE page 151; Critical Thinking, SE page 153; Process Skill, SE page 153; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 **Chapter 8, Lesson 2, Video B, SE page 164; Critical Thinking, SE page 167; Process Skill, SE page 167; Lesson 3, Video B, SE page 172; Video C, SE page 173; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 1, Video A, SE page 179; Video B, SE page 180; Video C, SE page 181; Critical Thinking, SE page 183; Lesson 2, Video A, SE page 187; Video B, SE page 188; Video C, SE page 189; Critical Thinking, SE page 191; Process Skill, SE page 191; Lesson 3, Video A, SE page 193; Video B, SE page 194; Video C, SE page 195; Critical Thinking, SE page 195; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174**

Standard 2: Physical Science: Students know and understand common properties, forms, and changes in matter and energy.
Strand 2.3: Students understand that interactions can produce changes in a system, although the total quantities of matter and energy remain unchanged.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Identifying and predicting what will change and what will remain unchanged when matter experiences an external force or energy change (for example, boiling a liquid; comparing the force, distance, and work involved in simple machines).
Chapter 7, Lesson 1, Video B, SE page 136; Critical Thinking, SE page 139; Lesson 3, Video A, SE page 143; Video B, SE page 144; Video C, SE page 145; Critical Thinking, SE page 147; Process Skill, SE page 147; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 **Chapter 8, Lesson 2, Video C, SE page 165; Process Skill, SE page 167** **Chapter 9, Lesson 2, Video B, SE page 188; Video C, SE page 189; Critical Thinking, SE page 191; Process Skill, SE page 191; Lesson 3, Video A, SE page 193; Video B, SE page 194; Video C, SE page 195; Critical Thinking, SE page 197**

Standard 2: Physical Science: Students know and understand common properties, forms, and changes in matter and energy.
Strand 2.3: Students understand that interactions can produce changes in a system, although the total quantities of matter and energy remain unchanged.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Observing and gathering data to support the concept of conservation of mass within a closed system (for example, precipitation reaction, forming mixtures, gas production).
Chapter 7, Lesson 1, Critical Thinking, SE page 139

Standard 2: Physical Science: Students know and understand common properties, forms, and changes in matter and energy.
Strand 2.3: Students understand that interactions can produce changes in a system, although the total quantities of matter and energy remain unchanged.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Describing, measuring (for example, temperature, mass, volume, melting point of a substance) and calculating quantities before and after a chemical or physical change within a system (for example, temperature change, mass change, specific heat).
Chapter 7, Lesson 1, Critical Thinking, SE page 139; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138 **Chapter 8, lesson 2, Video C, SE page 165; Critical Thinking, SE page 167; Lesson 3, Critical Thinking, SE page 175; Process Skill, SE page 175; LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 2, Video B, SE page 188; Video C, SE page 189; Critical Thinking, SE page 191; Process Skill, SE page 191**

Standard 2: Physical Science: Students know and understand common properties, forms, and changes in matter and energy.
Strand 2.3: Students understand that interactions can produce changes in a system, although the total quantities of matter and energy remain unchanged.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Describing, measuring (for example, time, distance, mass, force) and calculating quantities that characterize moving objects and their interactions within a system (for example, force, velocity, acceleration, potential energy, kinetic energy).
Chapter 9, Lesson 1, Video A, SE page 179; KnowZone, SE pages 184-185; Lesson 2, Video A, SE page 187; Video B, SE page 188; Video C, SE page 189; Critical Thinking, SE page 191; Process Skill, SE page 191; LabTime Hands-On Activity 9, TRB pages 159-161, TG page 174

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3.1: Students know and understand the characteristics of living things, the diversity of life, and how living things interact with each other and their environment.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Constructing and using classification systems based on the structure of organisms.
Level C: **Chapter 2, Lesson 1, Video B, SE page 26; Critical Thinking, SE page 29; Process Skill, SE page 29** **See also Level B:** **Chapter 1, Lesson 1, Video B, SE page 4; Lesson 2, Video A, SE page 10; Video C, SE page 11; Process Skill, SE page 13; Lesson 3, Video A, SE page 17; Process Skill, SE page 21**

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3.1: Students know and understand the characteristics of living things, the diversity of life, and how living things interact with each other and their environment.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Describing the importance of plant and animal adaptations, including local examples.
Chapter 2, Lesson 2, Video B, SE page 32; Video C, SE page 33; KnowZone, SE pages 36-37; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66**

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3.1: Students know and understand the characteristics of living things, the diversity of life, and how living things interact with each other and their environment.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Creating and interpreting food chains and food webs.
Level C: **Chapter 3, Lesson 1, Video C, SE page 49** **Food Web, SE page 203** **Energy Pyramid, SE page 203** **See also Level B:** **Chapter 2, Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Critical Thinking, SE page 35; Process Skill, SE page 35; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Food Web, SE page 203** **Energy Pyramid, SE page 203**

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3.1: Students know and understand the characteristics of living things, the diversity of life, and how living things interact with each other and their environment.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Explaining the interaction and interdependence of nonliving and living components within ecosystems.
Chapter 2, Lesson 2, Video B, SE page 32; Video C, SE page 33; Lesson 3, Video A, SE page 39; Video B, SE page 40; Video C, SE page 41; Critical Thinking, SE page 43; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48 **Chapter 3, Lesson 1, Video B, SE page 48; Video C, SE page 49; Critical Thinking, SE page 51; Process Skill, SE page 51; Lesson 2, Video A, SE page 53; Video B, SE page 54; Video C, SE page 55; Critical Thinking, SE page 57; Process Skill, SE page 57; Lesson 3, Video A, SE page 61; Video B, SE page 62; Critical Thinking, SE page 65; Process Skill, SE page 65**

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3.1: Students know and understand the characteristics of living things, the diversity of life, and how living things interact with each other and their environment.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Describing how an environment's ability to provide food, water, space, and essential nutrients determines carrying capacity.
Level C: **Chapter 3, Lesson 1, Video B, SE page 48; Video C, SE page 49; Critical Thinking, SE page 51; Process Skill, SE page 51: Lesson 3, Video A, SE page 61; Video B, SE page 62; Critical Thinking, SE page 65** **See also Level A:** **Chapter 2, Lesson 2, Critical Thinking, SE page 35; Process Skill, SE page 35; Lesson 3, Video B, SE page 62** **See also Level B:** **Chapter 2, Lesson 1, Video C, SE page 26; Critical Thinking, SE page 29** **Chapter 3, Lesson 3, Video B, SE page 62**

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3.2: Students know and understand interrelationships of matter and energy in living systems.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Describing the basic processes of photosynthesis and respiration and their importance to life (for example, set up a terrarium or aquarium and make changes such as blocking out light).
Level C: **Chapter 1, Lesson 2, Video A, SE page 9** **Chapter 7, Lesson 3, Video A, SE page 149** **See also Level B:** **Chapter 2, Lesson 2, Video A, SE page 31; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48**

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3.2: Students know and understand interrelationships of matter and energy in living systems.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Comparing and contrasting food webs within and between different ecosystems (for example, grasslands, tundra, marine) and predicting the consequences of disrupting one of the organisms in a food web.
Level C: **Chapter 3, Lesson 1, Video C, SE page 49** **Food Web, SE page 203** **Energy Pyramid, SE page 203** **See also Level B:** **Chapter 2, Lesson 2, Video A, SE page 31; Video B, SE page 32; Video C, SE page 33; Critical Thinking, SE page 35; Process Skill, SE page 35; LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Food Web, SE page 203** **Energy Pyramid, SE page 203**

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3.2: Students know and understand interrelationships of matter and energy in living systems.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Describing ways (for example, digestion, transport of nutrients by circulatory system) that multicellular organisms get food and other matter to their cells.
Chapter 1, Lesson 1, Video C, SE page 5; Lesson 2, Process Skill, SE page 13; Lesson 3, Video B, SE page 16; Video C, SE page 17; Critical Thinking, SE page 19; Process Skill, SE page 19

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3.2: Students know and understand interrelationships of matter and energy in living systems.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Explaining the recycling of materials by determining a pathway of a substance that is important for life (for example, trace water through an ecosystem).
Chapter 2, Lesson 2, Video A, SE page 31 **Chapter 3, Lesson 1, Video C, SE page 49; Lesson 3, Video A, SE page 61** **Chapter 4, Lesson 3, Video A, SE page 83; Process Skill, SE page 87** **Chapter 5, Lesson 2, Video B, SE page 98; Critical Thinking, SE page 101; Process Skill, SE page 101**

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3.2: Students know and understand interrelationships of matter and energy in living systems.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Describing the roles of organisms in the decomposition and recycling of dead organisms (for example, bacteria's role in the decomposition and recycling of matter from a dead animal).
Level C: **Chapter 3, Lesson 1, Video C, SE page 49** **See also Level B:** **Chapter 2, Lesson 2, Video C, SE page 33; Process Skill, SE page 35**

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3.3: Students know and understand how the human body functions, factors that influence its structures and functions, and how these structures and functions compare with those of other organisms.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Describing the observable components and functions of a cell (for example, cell membrane, nucleus, cytoplasm, chloroplasts; movement of molecules into and out of cells).
Chapter 1, Lesson 1, Video B, SE page 4; Video C, SE page 5; Critical Thinking, SE page 7; Lesson 2, Video A, SE page 9; Lesson 3, Video A, SE page 15; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3.3: Students know and understand how the human body functions, factors that influence its structures and functions, and how these structures and functions compare with those of other organisms.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Comparing and contrasting the basic structures and functions of different types of cells (for example, single-celled organisms in pond water, Elodea, onion cell, human cheek cell).
Chapter 1, Lesson 1, Video B, SE page 4; Video C, SE page 5; Critical Thinking, SE page 7; Lesson 2, Video A, SE page 9; Lesson 3, Video A, SE page 15; LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3.3: Students know and understand how the human body functions, factors that influence its structures and functions, and how these structures and functions compare with those of other organisms.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Describing the growth and development of several organisms (for example, embryonic development of a vertebrate).
Level C: **Chapter 2, Lesson 2, Video A, SE page 31** **See also Level A:** **Chapter 1, Lesson 3, Video A, SE page 17; Video B, SE page 18; Video C, SE page 19; Process Skill, SE page 21** **See also Level B:** **Chapter 1, Lesson 3, Video C, SE page 19**

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3.3: Students know and understand how the human body functions, factors that influence its structures and functions, and how these structures and functions compare with those of other organisms.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Describing the structures and functions of human body systems.
Chapter 1, Lesson 3, Video B, SE page 16; Video C, SE page 17

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3.3: Students know and understand how the human body functions, factors that influence its structures and functions, and how these structures and functions compare with those of other organisms.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Describing and giving examples of noncommunicable diseases and communicable diseases (for example, heart disease and chicken pox).
Chapter 1, Lesson 3, Video A, SE page 15; Critical Thinking, SE page 19; KnowZone, SE page 20-21

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3.4: Students know and understand how organisms change over time in terms of biological evolution and genetics.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Describing the purpose of body cell division and sex cell division.
This concept is not covered at this level.

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3.4: Students know and understand how organisms change over time in terms of biological evolution and genetics.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Describing the role of chromosomes and genes in heredity (for example, genes control traits, while chromosomes are made up of many genes).
This concept is not covered at this level.

Standard 3: Life Science: Students know and understand the characteristics and structures of living things, the processes of life, and how living things interact with each other and their environment.
Strand 3.4: Students know and understand how organisms change over time in terms of biological evolution and genetics.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Describing evidence that reveals changes or constancy in groups of organisms over geologic time.
Chapter 2, Lesson 1, Video C, SE page 27; Lesson 2, Video B, SE page 32; Video C, SE page 33 **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66**

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.1: Students know and understand the composition of earth, its history, and the natural processes that shape it.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Explaining how minerals, rocks, and soils form.
Chapter 4, Lesson 3, Video A, SE page 83; Video B, SE page 84; Video C, SE page 85

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.1: Students know and understand the composition of earth, its history, and the natural processes that shape it.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Explaining how fossils are formed and used as evidence to indicate that life has changed through time.
Chapter 2, Lesson 1, Video C, SE page 27 **Chapter 4, Lesson 3, Video A, SE page 83**

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.1: Students know and understand the composition of earth, its history, and the natural processes that shape it.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Modeling natural processes that shape Earth's surface (for example, weathering, erosion, mountain building, volcanic activity).
Chapter 4, Lesson 1, Video B, SE page 70; Video C, SE page 71; Critical thinking, SE page 73; KnowZone, SE pages 74-75; Lesson 2, Video A, SE page 77; Video B, SE page 78; Video C, SE page 79; Critical Thinking, SE page 81; Lesson 3, Video A, SE page 83; Video B, SE page 84; Video C, SE page 85; Process Skill, SE page 87

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.1: Students know and understand the composition of earth, its history, and the natural processes that shape it.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Explaining the distribution and causes of natural events for example, earthquakes, volcanoes, landslides).
Chapter 4, Lesson 1, Video C, SE page 71; Process Skill, SE page 73l KnowZone, SE pages 74-75 **Chapter 5, Lesson 3, Video B, SE page 104; Critical Thinking, SE pages 107; KnowZone, SE pages 108-109**

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.2: Students know and understand the general characteristics of the atmosphere and fundamental processes of weather.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Describing the basic composition, properties, and structure of the atmosphere (for example, the range and distribution of temperature and pressure in the troposphere and stratosphere).
Chapter 5, Lesson 1, Video A, SE page 91; Video C, SE page 93; Critical Thinking, SE page 95; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.2: Students know and understand the general characteristics of the atmosphere and fundamental processes of weather.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Observing, measuring, and recording changes in weather conditions (for example, humidity, temperature, air pressure, cloud types, wind, precipitation).
Chapter 5, Lesson 1, Video B, SE page 92; Lesson 2, Video B, SE page 98; Lesson 3, Video A, SE page 103; Video B, SE page 104; Video C, SE page 105; Critical Thinking, SE page 107; Process Skill, SE page 107

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.2: Students know and understand the general characteristics of the atmosphere and fundamental processes of weather.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Explaining how atmospheric circulation is driven by solar heating (for example, the transfer of energy by radiation, convection, conduction).
Chapter 5, Lesson 1, Video B, SE page 92; Lesson 2, Video B, SE page 98; Process Skill, SE page 101

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.2: Students know and understand the general characteristics of the atmosphere and fundamental processes of weather.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Describing large-scale and local weather systems (for example, fronts, air masses, storms).
Chapter 5, Lesson 1, Video B, SE page 92; Process Skill, SE page 95; Lesson 3, Video A, SE page 103; Video B, SE page 104; Video C, SE page 105; Critical Thinking, SE page 107; KnowZone, SE pages 108-109

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.3: Students know major sources of water, its uses, importance, and cyclic patterns of movement through the environment.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Investigating and comparing the properties and behavior of water in its solid, liquid, and gaseous states.
Chapter 5, Lesson 2, Video A, SE page 97; Video B, SE page 98; Critical Thinking, SE page 101; Process Skill, SE page 101 **Chapter 7, Lesson 1, Video B, SE page 136**

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.3: Students know major sources of water, its uses, importance, and cyclic patterns of movement through the environment.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Describing the distribution and circulation of the world's water through oceans, glaciers, rivers, groundwater, and atmosphere.
Chapter 4, Lesson 1, Video A, SE page 69 **Chapter 5, Lesson 2, Video A, SE page 97; Video B, SE page 98; Video C, SE page 99; Critical Thinking, SE page 101; Process Skill, SE page 101** **The Water Cycle, SE page 204**

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.3: Students know major sources of water, its uses, importance, and cyclic patterns of movement through the environment.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Describing the composition and physical characteristics of oceans (for example, currents, waves, features of the ocean floor, salinity).
Chapter 3, Lesson 2, Video A, SE page 53 **Chapter 4, Lesson 2, Video C, SE page 79** **Chapter 5, Lesson 2, Video A, SE page 97; Lesson 3, Video B, SE page 104; Video C, SE page 105** **Chapter 6, Lesson 2, Video B, SE page 122**

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.4: Students know the structure of the solar system, composition and interactions of objects in the universe, and how space is explored.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Describing the basic components, composition, size, and theories of origin of the solar system.
Chapter 6, Lesson 1, Video A, SE page 113; Video B, SE page 114; Video C, SE page 115; Critical Thinking, SE page 117; Process Skill, SE page 117; KnowZone, SE page 118-119

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.4: Students know the structure of the solar system, composition and interactions of objects in the universe, and how space is explored.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Explaining the effects of relative motion and positions of the Sun, Earth, and Moon (for example, seasons, eclipses, moon phases, tides).
Chapter 6, Lesson 2, Video A, SE page 121; Video B, SE page 122; Video C, SE page 123; Critical Thinking, SE page 125; Process Skill, SE page 125 **Earth in Space, SE page 205**

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.4: Students know the structure of the solar system, composition and interactions of objects in the universe, and how space is explored.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Comparing Earth to other planets (for example, size, composition, relative distance from the Sun).
Chapter 6, Lesson 1, Video B, SE page 114; Critical Thinking, SE page 117; Process Skill, SE page 117; KnowZone, SE pages 118-119

Standard 4: Earth and Space Science: Students know and understand the processes and interactions of earth's systems and the structures and dynamics of earth and other objects in space.
Strand 4.4: Students know the structure of the solar system, composition and interactions of objects in the universe, and how space is explored.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Identifying technology needed to explore space (for example, telescopes, spectroscopes, spacecraft, life support systems).
Chapter 6, Lesson 3, Video A, SE page 127; Video B, SE page 128; Video C, SE page 129; Critical Thinking, SE page 131

Standard 5: Students know and understand interrelationships among science, technology, and human activity and how they can affect the world.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Investigating and describing the extent of human uses of renewable and non-renewable resources (for example, forests, fossil fuels).
Chapter 3, Lesson 3, Video B, SE page 62; video C, SE page 63 **Chapter 4, Lesson 3, Video C, SE page 85; Critical Thinking, SE page 87** **Chapter 5, Lesson 1, Video C, SE page 93; Critical Thinking, SE page 95; Lesson 2, Video C, SE page 99; Critical Thinking, SE page 101** **Chapter 8, Lesson 1, Video C, SE page 159; Lesson 3, SE page 173; Critical Thinking, SE page 175**

Standard 5: Students know and understand interrelationships among science, technology, and human activity and how they can affect the world.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Describing advantages and disadvantages that might accompany the introduction of a new technology (for example, mountain bikes, cellular telephones, pagers).
Chapter 4, Lesson 3, video C, SE page 85; Critical Thinking, SE page 87 **Chapter 5, Lesson 1, Process Skill, SE page 95; Lesson 2, Video C, SE page 99; Critical Thinking, SE page 101** **Chapter 6, Lesson 3, Video B, SE page 128; Video C, SE page 129; Critical Thinking, SE page 131** **Chapter 8, Lesson 1, Video C, SE page 159; Lesson 3, Video C, SE page 173; Critical Thinking, SE page 175**

Standard 5: Students know and understand interrelationships among science, technology, and human activity and how they can affect the world.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Describing how the use of technology can help solve an individual or community problem (for example, using catalytic converters on automobiles to help reduce air pollution).
Chapter 2, Lesson 1, Video C, SE page 27 **Chapter 3, Lesson 3, Video B, SE page 62; Video C, SE page 63** **Chapter 5, Lesson 1, Video C, SE page 93; Lesson 2, Video C, SE page 99; LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, Lesson 3, Video B, SE page** 128; Video C, **SE page 129**

Standard 5: Students know and understand interrelationships among science, technology, and human activity and how they can affect the world.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Describing how people use science and technology in their professions.
Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4: Video C, SE page 5; Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Lesson 3, Video A, SE page 15; Video B, SE page 16 **Chapter 5 LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, Lesson 3, Video B, SE page 128; Video C, SE page 129** **Chapter 7, Lesson 2, Video B, SE page 144; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, Lesson C, Video C, SE page 165; KnowZone, SE pages 168-169** **Chapter 9, Lesson 2 Process Skill, SE page 191**

Standard 6: Students understand that science involves a particular way of knowing and understand common connections among scientific disciplines.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Explaining why a controlled experiment must have comparable results when repeated.
Chapter 1, LabTime Hands-On Activity 1, TRB pages 15-17, TG page 30 **Chapter 2, LabTime Hands-On Activity 2, TRB pages 33-35, TG page 48** **Chapter 3, LabTime Hands-On Activity 3, TRB pages 51-53, TG page 66** **Chapter 4, LabTime Hands-On Activity 4, TRB pages 69-71, TG page 84** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, LabTime Hands-On Activity 6, TRB pages 105-107, TG page 120** **Chapter 7, Lesson 2, Process Skill, SE page 147; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, LabTime Hands-On Activity 8, TRB pages 141-143, TG page 156** **Chapter 9, Lesson 2, Process Skill, SE page 191**

Standard 6: Students understand that science involves a particular way of knowing and understand common connections among scientific disciplines.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Giving examples of how scientific knowledge changes as new knowledge is acquired and previous ideas are modified (for example, through space exploration).
Chapter 1, KnowZone, SE pages 20-21 **Chapter 2, Lesson 1, Critical Thinking, SE page 29** **Chapter 3, KnowZone, SE pages 58-59** **Chapter 5, Lesson 2, Video C, SE page 99** **Chapter 6, KnowZone, SE pages 118-119; Lesson 3, Video A, SE page 127; Video B, SSE page 128; Video C, SE page 129**

Standard 6: Students understand that science involves a particular way of knowing and understand common connections among scientific disciplines.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Describing contributions to the advancement of science made by people in different cultures and at different times in history.
Chapter 1, Lesson 1, Video A, SE page 3; Video B, SE page 4: Video C, SE page 5; Lesson 2, Video A, SE page 9; Video B, SE page 10; Video C, SE page 11; Lesson 3, Video A, SE page 15; Video B, SE page 16 **Chapter 5 LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 6, Lesson 3, Video B, SE page 128; Video C, SE page 129** **Chapter 7, Lesson 2, Video B, SE page 144; LabTime Hands-On Activity 7, TRB pages 123-125, TG page 138** **Chapter 8, Lesson C, Video C, SE page 165; KnowZone, SE pages 168-169** **Chapter 9, Lesson 2 Process Skill, SE page 191**

Standard 6: Students understand that science involves a particular way of knowing and understand common connections among scientific disciplines.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Identifying, comparing, and predicting variables and conditions related to change (for example, climate, population, motion).
Chapter 1, Lesson 3, Critical Thinking, SE page 19 **Chapter 3, Lesson 1, Video C, SE page 49; Critical Thinking, SE page 51; Lesson 2, Critical Thinking, SE page 57; Lesson 3, Video A, SE page 61; Video B, SE page 62; Critical Thinking, SE page 65** **Chapter 4, Lesson2, Video A, SE page 77; Video B, SE page 78; Video C, SE page 79; Critical Thinking, SE page 81** **Chapter 5, Lesson 1, Video C, SE page 93l Critical Thinking, SE page 95; Lesson 2, Critical Thinking, SE page 101; Lesson 3, Video C, SE page 105; Critical Thinking, SE page 107** **Chapter 8, Lesson 1, Video C, SE page 159; Lesson 3, Process Skill, SE page 175**

Standard 6: Students understand that science involves a particular way of knowing and understand common connections among scientific disciplines.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Identifying and illustrating natural cycles within systems (for example, water, planetary motion, geological changes, climate).
Chapter 2, Lesson 2, Video A, SE page 31; KnowZone, SE pages 36-37 **Chapter 4, Lesson 2, Video A, SE page 83** **Chapter 5, Lesson 2, Video B, SE page 98; Process Skill, SE page 101; Lesson 3, Video C, SE page 105** **Chapter 6, Lesson 2, Video A, SE page 121; Video B, SE page 122; Video C, SE page 123** **Chapter 7, Lesson 1, Video B, SE page 136**

Standard 6: Students understand that science involves a particular way of knowing and understand common connections among scientific disciplines.
As students in grade 5 extend their knowledge, what they know and are able to do includes: Using a model to predict change (for example, computer simulation, video sequence, stream table).
Chapter 1, Lesson 1, Process Skill, SE page 7 **Chapter 4, Lesson 3, Process Skill, SE page 87** **Chapter 5, LabTime Hands-On Activity 5, TRB pages 87-89, TG page 102** **Chapter 9, Lesson1, Process Skill, SE page 183**